DOCUMENT RESUME

ED 304 369 SO 019 699

AUTHOR Masalski, Kathleen Woods
TITLE India's Vernacular Architecture as a Reflection of Culture.
SPONS AGENCY Center for International Education (ED), Washington, DC.
PUB DATE 87
NOTE 10p.; Script for a slide presentation (the slides are not included).
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051) -- Audiovisual Materials (100)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Architectural Character; *Climate; *Construction Materials; Cultural Activities; *Cultural Influences; Developing Nations; Foreign Countries; *Housing; Social Differences; Social Studies; Structural Elements (Construction); Teacher Developed Materials
IDENTIFIERS *India

ABSTRACT

This paper contains the narrative for a slide presentation on the architecture of India. Through the narration, the geography and climate of the country and the social conditions of the Indian people are discussed. Roofs and windows are adapted for the hot, rainy climate, while the availability of building materials ranges from palm leaves to mud and dung mixtures in the villages to burnt brick and concrete structures in the cities. Buildings in cities and villages also reflect the Indian caste system. The number of courtyards that a house has indicates the owner's wealth just as the color of stone in the past reflected the ethnicity of its occupants. Religions can also be determined by the lotus flower or leaf shape of the windows (Buddhism or Hinduism) or the separate quarters for men and women (orthodox Moslems). Indian tradition forbids visitors to enter a host's kitchen, so they are always set apart from other rooms. Architecture in India's cities is changing as India is modernized. (DJC)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED304369

# India s Vernacular Architecture

# as a

# Reflection of Culture

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

KATHLEEN WOODS MASALSKI

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Kathleen Woods Masalski
Fulbright-Hays Program
Summer 1987

30 04 449



BEST COPY AVAILABLE

## Introduction

Very little is written about the vernacular architecture of India. This paper is not intended to be a scholarly addition to that little which is written; rather, it is a script for a slide program to be presented to high school students to encourage them to look beyond the textbook for evidence of Indian culture. What follows is a "peek" at some examples of Indian architecture. I hope to extend the examples and elaborate upon the description as I continue my investigation of this fascinating aspect of Indian society.

"The architecture of India can be evaluated only on the basis of the culture that produced it." (Bussagi, 20) It is from this perspective that we look at the vernacular architecture of the subcontinent of Asia. The early history of Indian architecture deals mainly with temples; little of secular architecture survives. Still, that architecture which remains reflects like a clear mirror (Fabri, 4) the geography of a people as well as their economic, social, and political situations. Architecture is a valuable, visible document for interpreting and understanding the people of the past. What, then can we learn?

First, about India's geography... Bordered in the north by the Himalayas, the highest mountains on earth, the land extends across the Ganga plain and peninsular plateau to the southern tip of India where it "empties" into the Indian Ocean. (slide 1) She is such a vast country -- just look at her size in terms of the United States. (slide 2) -- the climatic conditions in the north have little relation to those in the south.

According to Fodor's travel guide India, Nepal and Srilanka, "Climate makes our architecture what it is." India's tropical climate, alternating between a pleasant winter with only a few cold nights, scorching summers followed by torrential rains and months of oppressing humidity, call for the cool cave and cellar (slide 3), garden with ponds and water channels (silde 4), terrace and airy pillar hall (slide 5), rising on a platform up several stories (slides 6). "Emotionally," Fodor says, "Indian architecture copied the extremes of climate with vehement symbols of creation and destruction." (Foder, 59) (slides 7 and 8)

This girl in Khuri village in Rajasthan is plastering her home with a mixture of mud and dung. Villagers travel miles to collect different varieties of dried mud which is then pummeled into a paste. This slide (9) shows a village in her area which reveals the typical mud housing in that hot and dusty climate (All India, 34)

The sun in much of India is a "relentless enemy of comfort" so large windows are

unsuitable. The small openings (as in the previous slide) are preferred in these regions. At the Vasant Vihar school in New Delhi (slide 10), windows are recessed -- and even more so on the South -- to keep out the summer sun. Some houses are absolutely without windows, or in some cases, windows are latticed (slide 11)

The amount of local precipitation determines the shape and form of the roof. Where precipitation is normal or moderate -- or heavy, as it is in Kashmir in the valley of the Himalayas, the roof is generally sloped, regardless of the material that is used in building. (slides 12, 13, 14.)

The most luxuriant rain forests lie in Kerala, on the southwest coast where the roofs are also appropriately sloped (slides 15, 16) In Mahabalipurum, the five rathas, or stone pavilions or chariots, (slide 17) are easy to mistake for the small mud village along the roadside. Their carved roofs illustrate that rainfall in this area traditionally has been heavier than in other parts of India.

Where precipitation is below normal, roofs are flat; there is no need to provide an angle for runoff. This private house in Delhi (slide 18) and these apartment houses in Ahmedabad (slide 19) illustrate the point.

During the monsoon season, the water comes down in buckets for a while, then the sun comes out and it s quite pleasant. The orientation of these apartments and their spatial design tunnels monsoon breezes though the rooms (slide 20) of this cooperative housing project near Delhi.

In much of India, because of the climate, little or no distinction is made between the in and out of doors. The climate forces people with their charpoi (cots) into the courtyard or the

street. (slide 21) On the other hand, the pattern of development in Srinagar is in direct response to the cold climate of the Kashmir Valley. The open space on the top floor here provides a place for storing wood. (slide 22)

The influence of geography is evident too, when we look at the height of buildings. These tall thin structures, again in Srinagar seem to assert their verticality (slide 23) while these in the Madras area, close to sea level, seem to hug the ground. The building color is the same as the sandy soil. (slide 24)

Besides reflecting the climate, the architecture of a region reflects available materials. Transportation remains a problem in India today, so particularly in the villages, the materials that are used tend to be those found in the surrounding area.

People in early times lived in houses made of mud and mudbrick, bamboo and timber. Leaves and straw and thatch were used everywhere. Although not much tangible evidence of the early timbered/wooden huts exist, pictures of them have been drawn on stone in caves (Lomas Rishi cave, Bihar) which tell us about the type of houses in which people lived as long ago as third century B.C. (Fabri, 7) Village huts today in many part of India use those same materials: from palm leaf huts in Kerala (slide 25) to mudbrick houses of almost any hamlet on the Gangetic plain.

However, the face of the village is changing. There are fewer mud and thatch buildings and more and more village houses of burnt brick and even the reinforced cement concrete that is so prevalent in the cities. (slide 26) This is cement with sand built round iron or steel makes them extra-ordinarily sturdy. (slide 26) Still, the local rose pink colored stone of Jaipur, described as the "tone of autumn sunset" (slide 27) is responsible for making her one of the most beautiful of all Indian cities.

There are other ways that architecture gives us insight into the culture. The status or wealth of a person or family can be surmised from looking at the dwelling which he/they inhabit. It is obvious in this slide (28) that the poor of Delhi are in need of better housing. These "lean tos" are among the most common style of architecture in India. Literary sources tell that mud, straw, bamboo, and reed were always the materials of the common people. Richer constructions were of wood and sometimes of brick. Rarely was stone used for private dwellings. (Roy, 9)

"Stone or wood is worthy of gods, Brahmins, kings and hermits, but unsuited to Vaishyas and Shudras." (from the Mayamata Manuscript as quoted in Volwahsen, 173)

Materials used for construction were linked to the caste system. White stone, we are told, was used only by Brahmins, red by Kshatruyas, yellow by Vaishyas and black by Shudras. (Volwahsen,173) However, this slide (29) of Jodphur shows the blue of the Brahmin's houses in 1950.

Interestingly, the early rules of color also coordinated with sex. A temple of stone and brick celebrated a male god; brick and wood, female; all three; neuter. (Volwahsen, 173)

In some villages today, each caste has its separate council house with another council house for affairs which concern the entire village. No one of lower caste would be allowed -- nor would he consider -- entering the council house of a higher caste.

Another characteristic of richer houses in some villages is the courtyard. The number of courtyards corresponds to the wealth of the owner or family: the more courtyards, the wealthier the inhabitants. (slide 30)

Finally, tradition is reflected in the architecture of the people. Architecture in India has passed through a succession of styles from the times of the prehistoric lake dwellers to modern

steel and concrete construction. (Fodor, 89) (slide 31)

The early act of building began by "determining the rapport between the universe and the chosen terrain. The earth must be placated to establish a favorable relationship between it and the dwelling that was to rise upon it (p.65, Bussagi) Some aspects of that practice remain true today. Unfortunately, hardly any structure that was meant for a dwelling house of "mere mortals and datable before the late medieval period" has come down to us, so it is difficult to trace the traditions of the architecture.

The ancient "Shilpashastras" prohibited using certain wood for dwellings: those struck by lightning, those in which birds had built nests, or those growing near burial or crematory grounds, or those trampled by elephants were not to be used. (Insight, 295)

Some symbolism of Hinduism and Buddhism remain. For example, the form of the dormer windows and gable ends of Indian cottages is similar to the lotus flower and leaf (slide 32). Rangali designs, the colored powder decorations found outside many doorways, represent a tie with the past (slide 33) and can be found even in cities.

The house itself is also an important symbol in orthodox Muslim families, as it represents the separation from women of all men except those of their own families. This custom is called purdah. (slide 34)

Inside the Indian house, tradition is considered too. Family members remove their shoes when entering the kitchen. Visitors to the traditional Indian home in custom must not even enter the kitchen. So, too, in these new apartments in Delhi, the kitchen is set away from general circulation for that purpose (slide 35).

Even when cities arose to meet the needs of markets, they retained their rural character, in terms of buildings. They were laboratories of what existed in the villages; only the materials and decorations were changed. In staff housing at Sri Dasmesh Academy, Anandpur Sahib, the "tenements" and adjacent spaces recall traditional village paths known as galis. (slide 36)

But the move to the city has meant a change. Urban space has loosened the knots of tradition. The small unit living complex, for example, often interferes with the continuation of the joint family and with the role of women. The changing architectural landscape of India reflects an India that is herself changing.

By 1955 she had over 750 million people. At Independence there were 300 architects in India. Today there is one architect for every 75, 000 people. There are 34 institutions which offer architecture and engineering programs. (Moniteur, 155) The direction that architecture will take in India in the near future will be determined by these people. Regardless of the changes, India's vernacular architecture will continue to offer the careful observer a resource for learning about India's heritage. (slide 37)

Bibliography


Bussagi, Mario. Oriental Architecture. New York: Harry N. Abrams, Inc., 1973.

Fabri, Charles. An Introduction to Indian Architecture. New York: Asia Publishing House, 1963.

Hovell, E.B. A Handbook of Indian Art. London: John Murray, 1926.

Hurlimann, Martin. India. New York: B. Westermann Co., Inc. 1928.

"India." Focus on Asian Studies. New York: The Asia Society, Fall 1985.

India: Insight Guides. Germany: Drukerei Ernst Uhi, 1985.

India (Library of Nations). Amsterdam: Time-Life Books, 1986.

India, Nepal and Sri Lanka. New York: Fodor s Travel Guides, 1987.

India: A Travel Survival Kit. Victoria, Australia: Lonely Planet Publications, 1987.

Isenberg, Irwin, (ed.). The Nations of the Indian Sub-Continent. New York: H.W. Wilson, Co., 1974.

Massey, Reginald, (ed.). All India. Secaucus, New Jersey: Chartwell Books, Inc., 1986.

Moniteur, Electa. Architecture in India. Paris: Electa France, Milan, 1986.

Roy, Amita. Villages, Towns and Secular Buildings in Ancient India. Calcutta: Firma K.L. Mukhopodhyay, 1957.

Smith, Bradford. Portrait of India. Philadelphia: J.B. Loppincott Co., 1962.

Volwahsen, Andreas. Living Architecture: Indian. New York: Grosset and Dunlap, 1969.